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EXAMINER

SHEIKH, ASFAND M

ART UNIT

PAPER NUMBER

3627

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/796,425	Applicant(s) CHAMBERS ET AL.	
	Examiner Asfand M. Sheikh	Art Unit 3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

However the examiner notes the following:

With respect to the arguments directed to 35 U.S.C § 101, and how claims 1-10 and 11-13, are directed to “by identifying the apparatus that accomplishes the method steps). The examiner notes that a "usage level application" and "a broadcast message application" are not apparatus. The examiner notes a “switching center” and “messaging center” can further be interpreted as forms of software as the claims and applicant's specification does not particularly point out “switching center” and “messaging center” are hardware. Therefore the examiner finds this argument not persuasive.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 and 24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 and 24 recites the limitation "the prepaid platform" in the second limitation of the claim. There is insufficient antecedent basis for this limitation in the claim.

In particular, claim 19-27 recites in the preamble "An apparatus for load-based billing of customers in a communications network", the body of the claim does not contain any limitation indicating the structure of the device. A system or an apparatus claim should always claim the structure or the hardware that performs the function. Applicant's claimed limitations consist of applications: the examiner notes that a "usage level application" and "a broadcast message application" are not apparatus. The examiner notes a "switching center" and "messaging center" can further be interpreted as forms of software that do not describe the structure of the device. The applicant's specification does not make it clear that the "means for" is tied to an apparatus. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 and 11-13 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, the claims are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101.

Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.

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Claims 19-27 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter, which is not patent eligible under 35 U.S.C. 101. The examiner notes the apparatus 19-27 are directed to software per se, more specifically: that a "usage level application" and "a broadcast message application" are not a form of an apparatus. The examiner notes a "switching center" and "messaging center" can further be interpreted as forms of software. The examiner notes that these features do not fall within one of the four statutory classes of invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 14, 16-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney (US 6,947,724 B2) in view of McHenry (US 6,397,055 B1).

Claim 1 and 19

Chaney discloses a method of load-based billing for customers in a communication network (see at least, title and abstract: the examiner notes billing a call placed by the user based on a reported traffic load in the network), the method comprising:

monitoring utilization of the network by a plurality of network users in real-time (see at least, col. 6, lines 49-col. 7, line 19: the examiner notes billing a user based on the actual reported traffic load in the network at the time the user places a call (e.g. interpreted to be real time));

detecting a reportable statistical event based upon the occurrence of a predetermined event trigger (see at least, col. 6, lines 49-col. 7, line 19: the examiner notes the examiner notes predefined trigger events cause a message to be sent which are based on traffic load changes by a threshold amount (e.g. statistical event));

informing a usage level application of the reportable statistical event (see at least, col. 6, lines 49-col. 7, line 19 and col. 8, lines 21-24: the examiner notes PIM

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Server (e.g. would contain an application) obtains the message the traffic load levels from the message);

recording at the usage level application that a Usage Level Event has occurred (see at least, col. 6, lines 49-col. 7, line 19 and col. 7, lines 46-51: the examiner notes the PIM server (e.g. would contain an application) calculates the traffic load based on the reports (e.g. messages) received and col. 8, lines 21-24: the examiner notes PIM Server obtains the message the traffic load levels from the message);

reporting the Usage Level Event to a set of network elements via the usage level application (see at least, col. 8, lines 49-53: the examiner notes the PIM server sends real-time network traffic load (ULE) information to a user); and

notifying customers of a change in pricing for calls (see at least, col. 7, lines 9-19: the examiner notes as each range increases customers placing calls at the time frame would be charged a different price and further the customer is notified by the PIM server (see 8, lines 48-54).

Chaney fails to disclose:

a switching center for monitoring the network and detecting an event;

determining at the usage level application whether a Usage Level Event has occurred;

recording at the usage level application the Usage Level Event, **when it is determined** that a Usage Level Event has occurred;

reporting the Usage Level Event to a set of network elements via the usage level application and the switching center, **when it is determined that a Usage Level Event**

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has occurred, the set of network elements including a customer billing platform and a broadcast message application; and

notifying a set of customers of a change in pricing for calls based upon the Usage Level Event through the broadcast message application and a messaging center, when it is determined that a Usage Level Event has occurred.

McHenry discloses a switching center for monitoring the network and detecting an event (see at least, col. 7, lines 54-col. 8, lines 9: the examiner notes a MSC (e.g. mobile switching center) controls the operations of a network (e.g. monitor/detect) and provides selective switched connections and col. 8, lines 10-28: the examiner notes a LEC telephone switching for landline and interacts with the MSC);

determining at the usage level application whether an event has occurred (see at least, col. 11, lines 52-67: the examiner notes when a call is answered the MSC creates a data record (e.g. determination is the step of the call being answered) and col. 13, lines 57-col. 14, line 4: the examiner notes the switch will initiate call recording (e.g. record of call));

recording at the usage level application the event, when it is determined that a event has occurred (see at least, col. 11, lines 52-67: the examiner notes when a call is answered the MSC creates a data record col. 13, lines 57-col. 14, line 4: the examiner notes the LEC switch will initiate call recording (e.g. record of call));

reporting the event to a set of network elements via the usage level application and the switching center, when it is determined that a Usage Level Event has occurred, the set of network elements including a customer billing platform and a broadcast

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message application (see at least, col. 11, lines 52-67: the examiner notes the MSC forwards the event to an accounting office for bill processing and col. 12, lines 24-51: an interactive session is taken with the caller (e.g. a recorded announcement) can be transmitted and col. 13, lines 57-col. 14, line 4, the switch will initiate call recording and the clearing house assembles billing information and forwards to the appropriate accounting office); and

notifying a customer of a change in pricing for calls based upon the event through the broadcast message application and a messaging center, when it is determined that a event has occurred (see at least, col. 12, lines 24-51: an interactive session is taken with the caller (e.g. a recorded announcement can be transmitted) to transmit a change of price in billing (e.g. being charged for the call).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include a switching center for monitoring the network and detecting an event; determining at the usage level application whether an event has occurred; recording at the usage level application the event, when it is determined that a event has occurred; reporting the event to a set of network elements via the usage level application and the switching center, when it is determined that an event has occurred, the set of network elements including a customer billing platform and a broadcast message application and notifying a set of customers of a change in pricing for calls based upon the event through the broadcast message application and a messaging center, when it is determined that a event has occurred as taught by McHenry. One of ordinary skill in the art would have been

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motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Claim 2 and 20

Chaney discloses wherein the predetermined event trigger comprises an upper threshold, a lower threshold, a trending threshold, or a duration threshold, or a combination of these thresholds (see at least, col. 7, lines 11-19: the examiner notes the ranges of load represent a trending threshold).

Claim 3

Chaney discloses a Usage Level event is based upon an upper threshold, a lower threshold, a trending threshold, or a duration threshold, or a combination of these thresholds (see at least, col. 7, lines 11-19: the examiner notes the ranges of load represent a trending threshold) however fails to disclose the determination of whether a Usage Level Event is based on identifier.

McHenry discloses determination whether an event is based on an identifier (see at least, col. 11, lines 52-67: the examiner notes when a call is answered the MSC creates a data record (e.g. determination is the step of the call being answered) and 13, lines 57-col. 14, line 4: the examiner notes the switch will initiate call recording (e.g. record of call)).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include whether an even is based on an identifier as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Claim 4 and 21

Chaney discloses wherein the communication network comprises a wireless network (see at least, col. 3, lines 58-60: the examiner notes 3GPP) however fails to disclose the switching center comprises a mobile switching center.

McHenry discloses the switching center comprises a mobile switching center (see at least, col. 7, lines 54-col. 8, lines 9: the examiner notes a MSC (e.g. mobile switching center) controls the operations of a network);

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include the switching center comprises a mobile switching center as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Claim 5 and 22

Chaney fails to disclose wherein the set of network elements further includes a prepaid platform.

McHenry discloses wherein the set of network elements further includes a prepaid platform (see at least, col. 6, lines 47-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include wherein the set of network elements further includes a prepaid platform as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Claim 6 and 23

Chaney discloses a ULE (see at least, col. 6, lines 49-col. 7, line 19) however fails to disclose further comprising: via the switching center, writing billing records for the customers and marking calls in the billing records that are based upon the event; and transferring the billing records to the billing platform.

McHenry discloses via the switching center, writing billing records for the customers and marking calls in the billing records that are based upon the event; and transferring the billing records to the billing platform (see at least, col. 7, lines 61-col. 8,

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lines 9: the examiner notes the MSC accumulates call processing data for calls (e.g. completed calls) and supplies this data to an accounting office for bill processing and 13, lines 57-col. 14, line 4: the examiner notes the switch will initiate call recording (e.g. record of call) and the clearing house assembles billing information and forwards to the appropriate accounting office).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include via the switching center, writing billing records for the customers and marking calls in the billing records that are based upon the event; and transferring the billing records to the billing platform as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Claim 7 and 24

Chaney discloses a ULE (see at least, col. 6, lines 49-col. 7, line 19) however fails to disclose further comprising: determining at the usage level application that a Usage Level Event should be terminated based upon a set of usage event termination criteria informing the prepaid platform, the messaging center, the broadcast message application, and the mobile switching center that the Usage Level Event has terminated; and notifying the customers via the messaging center that the change in pricing has terminated.

McHenry discloses determining at the usage level application that a event should be terminated based upon a set of usage event termination criteria informing the prepaid platform the messaging center, the broadcast message application, and the mobile switching center that the event has terminated (see at least, col. 12, lines 24-51: the examiner notes a caller may indicate refusal to pay for a call which acts a termination criteria that will end the call and further the examiner interprets that informing would be in the form of the prepaid/message center would obtain the refusal of the customer based on the customer interface and the MSC would obtain the termination of the call); and notifying the customers via the messaging center that the change in pricing has terminated (see at least, col. 12, lines 24-51: the examiner notes a caller may indicate refusal to pay for a call which is verbal response in which that examiner interprets would entail notification to the customer (previously or currently) that the charge will not be assessed to the customer).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include : determining at the usage level application that a event should be terminated based upon a set of usage event termination criteria informing the prepaid platform, the messaging center, the broadcast message application, and the mobile switching center that the event has terminated; and notifying the customers via the messaging center that the change in pricing has terminated as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real

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time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Claim 8 and 25

Chaney discloses the utilization of the network includes radio network occupancy, trunk occupancy, call processing occupancy, signaling occupancy, or a combination of these (see at least, col. 7, lines 9-19: the examiner notes utilization is based on call processing occupancy).

Claim 9 and 26

Chaney discloses wherein the communication network comprises a multimedia communication network and the switching center comprises a call session control function (see at least, col. 3, lines 55-67: the examiner notes a CSCF and col. 5, lines 20-29).

Claim 10 and 27

Chaney fails to disclose wherein the communication network comprises a landline network and the switching center comprises a landline switching office.

McHenry discloses wherein the communication network comprises a landline network and the switching center comprises a landline switching office (see at least,

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abstract and col. 8, lines 9-28: the examiner notes a LEC telephone switching for landline and interacts with the MSC).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include wherein the communication network comprises a landline network and the switching center comprises a landline switching office as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Claim 14

Chaney discloses an apparatus for load-based billing of subscribers in a communication network (see at least, title and abstract: the examiner notes billing a call placed by the user based on a reported traffic load in the network), the apparatus comprising:

a plurality of communication devices operative to receive and transmit at least one of voice, text, multimedia and data communication (see at least, col. 3, lines 58-64: the examiner notes 3GPP architecture would include a plurality of terminals (e.g. cellular/mobile devices));

a server to monitor the utilization of the network (see at least, col. 7, lines 56-51: the examiner a PIM server calculates network load traffic)

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a subscriber database operative to store subscriber profile information and location information (see at least, col. 4, lines 3-19: the examiner notes a HSS is a database for a given user information and used to locate the users CSCF (e.g. location information);

a usage level application operative to analyze load usage by the plurality of communication devices in the network (see at least, see at least, col. 6, lines 49-col. 7, line 19: the examiner notes the examiner notes predefined trigger events cause a message to be sent which are based on traffic load changes by a threshold amount (e.g. statistical event) and col. 7, lines 56-51: the examiner a PIM server calculates network load traffic);

Chaney fails to disclose:

a switching center operative to route calls to and from the communication devices in the network;

a messaging center operative to direct messages to and receive messages from the communication devices;

a billing platform operative to receive call detail records from the switching center;

a usage level application operative determine whether a Usage Level Event has occurred; and

a broadcast message application including a set of predetermined messages relating to Usage Level Events.

However McHenry discloses a switching center operative to route calls to and from the communication devices in the network (see at least, col. 7, lines 54-col. 8, lines 9: the examiner notes a MSC (e.g. mobile switching center) controls the operations of a network (e.g. monitor/detect) and provides selective switched connections and col. 8, lines 10-28: the examiner notes a LEC telephone switching for landline and interacts with the MSC);

a messaging center operative to direct messages to and receive messages from the communication devices (see at least, col. 12, lines 24-51: the examiner notes a tandem)

a billing platform operative to receive call detail records from the switching center (see at least, col. 11, lines 52-67: the examiner notes the MSC forwards the event to an accounting office for bill processing and col. 13, lines 57-col. 14, line 4, the switch will initiate call recording and the clearing house assembles billing information and forwards to the appropriate accounting office)

a usage level application operative determine whether a event has occurred (see at least, col. 11, lines 52-67: the examiner notes when a call is answered the MSC creates a data record (e.g. determination is the step of the call being answered) and col. 13, lines 57-col. 14, line 4: the examiner notes the switch will initiate call recording (e.g. record of call)); and

a broadcast message application including a set of predetermined messages relating to a event (see at least, col. 12, lines 24-51: an interactive session is taken with the caller (e.g. a recorded announcement).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include a switching center operative to route calls to and from the communication devices in the network; a messaging center operative to direct messages to and receive messages from the communication devices; a billing platform operative to receive call detail records from the switching center; a usage level application operative determine whether a event has occurred; and a broadcast message application including a set of predetermined messages relating to a event as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Claim 16

Chaney discloses wherein the communication network comprises a wireless communication network (see at least, col. 3, lines 58-62: the examiner notes 3GPP); the subscriber database comprises a home location register (see at least, col. 4, lines 3-19: the examiner notes a HSS); and a short message service server (see at least, col. 4, lines 3-19: the examiner notes a PIM server (e.g. instant messaging)).

Chaney fails to disclose the switching center comprises a mobile switching and a messaging center.

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However McHenry discloses a switching center comprises a mobile switching (see at least, col. 7, lines 54-col. 8, lines 9: the examiner notes a MSC (e.g. mobile switching center) and a messaging center (see at least, col. 12, lines 24-51: the examiner notes a tandem).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include the switching center comprises a mobile switching and a messaging center as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Claim 17

Chaney discloses wherein the communication network comprises a multimedia communication network (see at least, col. 5, lines 20-29); the switching center comprises a call session control function (see at least, col. 3, lines 58-62: the examiner notes a CSCF); and the subscriber database comprises a home subscriber service (see at least, col. 4, lines 3-19: the examiner notes a HSS).

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Claim 18

Chaney fails to disclose wherein the communication network comprises a landline network; the switching center comprises a landline switching office; and the subscriber database comprises an internal subscriber record database.

However McHenry discloses wherein: the communication network comprises a landline network (see at least, col. 8, lines 10-28); the switching center comprises a landline switching office (see at least, col. 8, lines 10-28); and the subscriber database comprises an internal subscriber record database (see at least, col. 6, lines 9-13: the examiner notes a database associated with a landline that can determine subscriber billing).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include wherein the communication network comprises a landline network; the switching center comprises a landline switching office; and the subscriber database comprises an internal subscriber record database as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

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Claims 11-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney (US 6,947,724 B2) in view of McHenry (US 6,397,055 B1) and Chen (US 6,574,464 B1).

Claim 11

Chaney discloses in a communication network, a method of load-based billing for a service provider of communication services having a plurality of customers (see at least, title and abstract: the examiner notes billing a call placed by the user based on a reported traffic load in the network), the method comprising:

monitoring utilization of the network by a plurality of network users in real-time (see at least, col. 6, lines 49-col. 7, line 19: the examiner notes billing a user based on the actual reported traffic load in the network at the time the user places a call (e.g. interpreted to be real time));

detecting a reportable statistical event based upon the occurrence of a predetermined event trigger (see at least, col. 6, lines 49-col. 7, line 19: the examiner notes the examiner notes predefined trigger events cause a message to be sent which are based on traffic load changes by a threshold amount (e.g. statistical event));

informing a usage level application of the reportable statistical event (see at least, col. 6, lines 49-col. 7, line 19 and col. 8, lines 21-24: the examiner notes PIM Server (e.g. would contain an application) obtains the message the traffic load levels from the message);

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recording at the usage level application that a Usage Level Event has occurred (see at least, col. 6, lines 49-col. 7, line 19 and col. 7, lines 46-51: the examiner notes the PIM server (e.g. would contain an application) calculates the traffic load based on the reports (e.g. messages) received and col. 8, lines 21-24: the examiner notes PIM Server obtains the message the traffic load levels from the message);

sending a message, the message indicating the Usage Level Event and the scope of the event (see at least, col. 8, lines 49-53: the examiner notes the PIM server sends real-time network traffic load (ULE/scope (e.g. traffic range)) information); and

notification to customers of a change in pricing (temporary for different ranges) for calls (see at least, col. 7, lines 9-35: the examiner notes as each range increases customers placing calls at the time frame would be charged a different price and further the customer is notified by the PIM server (see 8, lines 48-54).

Chaney fails to disclose:

a switching center for monitoring the network and detecting an event;

determining at the usage level application whether a Usage Level Event has occurred;

recording at the usage level application the Usage Level Event and scope of the event, **when it is determined** that a Usage Level Event has occurred;

sending a message to a targeted marketing application, the message indicating the Usage Level Event and the scope of the event;

retrieving from a subscriber database billing rate information for the calling plans based upon the Usage Level Event;

querying the targeted marketing application for information concerning the customers that are active within the scope of the Usage Level Event and the calling plans that are impacted by the Usage Level Event; and

sending a message to the customers that are active within the scope of the Usage Level Event, the message including a notification to the customers of a temporary change in pricing based upon the Usage Level Event.

McHenry discloses a switching center for monitoring the network and detecting an event (see at least, col. 7, lines 54-col. 8, lines 9: the examiner notes a MSC (e.g. mobile switching center) controls the operations of a network (e.g. monitor/detect) and provides selective switched connections and col. 8, lines 10-28: the examiner notes a LEC telephone switching for landline and interacts with the MSC);

determining at the usage level application whether an event has occurred (see at least, col. 11, lines 52-67: the examiner notes when a call is answered the MSC creates a data record (e.g. determination is the step of the call being answered) and col. 13, lines 57-col. 14, line 4: the examiner notes the switch will initiate call recording (e.g. record of call));

recording at the usage level application the event, when it is determined that a event has occurred (see at least, col. 11, lines 52-67: the examiner notes when a call is answered the MSC creates a data record col. 13, lines 57-col. 14, line 4: the examiner notes the LEC switch will initiate call recording (e.g. record of call));

sending a message to a customer that is active within the scope of the event, the message including notification to the customer of a price change based on the event

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(see at least, col. 12, lines 24-51: an interactive session is taken with the caller (e.g. a recorded announcement can be transmitted) to transmit a change of price in billing (e.g. being charged for the call).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include a switching center for monitoring the network and detecting an event; determining at the usage level application whether an event has occurred; recording at the usage level application the event, when it is determined that a event has occurred; sending a message to a customer that is active within the scope of the event, the message including notification to the customer of a price change based on the event as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Chaney in view of McHenry fail to disclose sending a message to a targeted marketing application, the message indicating the Usage Level Event and the scope of the event;

retrieving from a subscriber database billing rate information for the calling plans based upon the Usage Level Event;

querying the targeted marketing application for information concerning the customers that are active within the scope of the Usage Level Event and the calling plans that are impacted by the Usage Level Event.

However Chen discloses sending a message to a targeted marketing application, the message indicating the event and the scope of the event (see at least, col. 5, lines 40-48: the examiner notes SSP contains a switching service function and call control function that watch from a trigger (e.g. event) and scope (variable billing rate see col. 7, lines 16-52);

retrieving from a subscriber database billing rate information for the calling plans based upon the event (see at least, col. 7, lines 16-52: the examiner notes a SDB notes a variable billing rate for a subscriber);

querying the targeted marketing application for information concerning the customers that are active within the scope of the event and the calling plans that are impacted by the event (see at least, col. 7, lines 16-52: the examiner notes switching takes place for users who require the different billing rate).

It would have been obvious at the time the invention was made to modify the teachings of Chaney in view of McHenry to include sending a message to a targeted marketing application, the message indicating the event and the scope of the event; retrieving from a subscriber database billing rate information for the calling plans based upon the event; querying the targeted marketing application for information concerning the customers that are active within the scope of the event and the calling plans that are impacted by the event as taught by Chen. One of ordinary skill in the art would have been motivated to combine the teachings in order to change the billing rate for the telecommunication service in real time (see at least, Chen, col. 2, lines 32-35).

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Claim 12

Chaney discloses wherein the communication network comprises a wireless communication network (see at least, col. 3, lines 58-62: the examiner notes 3GPP); the subscriber database comprises a home location register (see at least, col. 4, lines 3-19: the examiner notes a HSS); and a short message service server (see at least, col. 4, lines 3-19: the examiner notes a PIM server (e.g. instant messaging)).

Chaney fails to disclose the switching center comprises a mobile switching and a messaging center.

However McHenry discloses a switching center comprises a mobile switching (see at least, col. 7, lines 54-col. 8, lines 9: the examiner notes a MSC (e.g. mobile switching center) and a messaging center (see at least, col. 12, lines 24-51: the examiner notes a tandem).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include the switching center comprises a mobile switching and a messaging center as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

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Claim 13 and 15

Chaney discloses short message service server (see at least, col. 4, lines 3-19: the examiner notes a PIM server (e.g. instant messaging)) however fails to disclose wherein the message from the message service center includes a customer list parameter, the customer list parameter comprising an identifier for groups of customers or discrete customers.

However McHenry discloses wherein the message from the message service center includes a customer list parameter, the customer list parameter comprising an identifier for groups of customers or discrete customers (see at least, col. 12, lines 1-51: the examiner notes the LIDB contains account information and identification relating to a customer (see col. 9, lines 13-26) and records for the service and the examiner notes discrete customers are notified based on there service (e.g. target specific customers)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Chaney to include wherein the message from the message service center includes a customer list parameter, the customer list parameter comprising an identifier for groups of customers or discrete customers as taught by McHenry. One of ordinary skill in the art would have been motivated to combine the teachings in order to track air-time charges in real time for both calling and called party usage, which often are determined at different rates, and appropriately allocating all charges to the calling party (see at least, McHenry, col. 5, lines 38-41).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asfand M. Sheikh whose telephone number is (571)272-1466. The examiner can normally be reached on 9a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ryan M. Zeender can be reached on (571)272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Asfand M. Sheikh/
Examiner, Art Unit 3627
8/31/2009